

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) Compositions for the preservative treatment of raw animal hides, characterized in that such compositions contain a mixture of:
at least one superabsorbent (co)polymer capable of absorbing the internal moisture of the rawhide when deposited on the surface of the hide, while allowing the internal moisture necessary for good preservation of the hide to remain, and of
at least one other hydrophilic agent,
optionally bactericides, preservative agents, and the like,
wherein the monomers used to form the superabsorbent polymers are monomers containing one or more members selected from the group consisting of: carboxyl groups; mono or polycarboxylic acids with monoethylene unsaturation; carboxylic acid anhydrides; polycarboxylic acid anhydrides with monoethylene unsaturation; carboxylic acid salts; water-soluble salts; alkaline metal salts, ammonium salts, amine salts, of mono or polycarboxylic acids with monoethylene unsaturation; sulfonic acid groups; aliphatic or aromatic vinylsulfonic acids; ~~sulfonic acid groups~~; alkaline metal salts, ammonium salts, amino salts of monomers containing sulfonic acid groups; hydroxyl groups; alcohols with monoethylene unsaturation; amide groups; (meth)acrylamide, N-alkyl (meth)acrylamides, N,N-dialkyl (meth)acrylamides, N-hydroxyalkyl (meth)acrylamides, vinyl lactames; amino groups; esters containing amino groups of mono or di-carboxylic acid with monoethylene unsaturation, heterocyclic vinyl compounds; quaternary ammonium salts; and salts of N,N,N-trialkyl-N-(meth)acryloyloxyalkylammonium.

2. (Previously Presented) Compositions for the preservative treatment of raw animal hides as specified in claim 1, wherein the superabsorbent polymers are capable of absorbing the internal moisture of the rawhide when such polymers are deposited on the surface of the hide, while allowing a residual moisture ranging from 20 to 70% by weight of the water-containing hide to remain in the hide.

3. (Previously Presented) Compositions for the preservative treatment of raw animal hides as specified in claim 1, wherein the superabsorbent polymers are capable of absorbing the internal moisture of the rawhide when they are deposited on the surface of the hide, while allowing a residual moisture of the order of 50% to remain in the hide.

Claim 4 (Canceled)

5. (Currently Amended) Compositions for preservative treatment of animal rawhides as specified in claim 1, wherein the monomers used to form appropriate superabsorbent polymers are selected from members of the group consisting of: acrylamide, acrylic acid, methacrylic acid, sulfomethylated or chloromethylated dimethylaminoethyl acrylate, and chloromethylated or sulfomethylated dimethylaminoethyl-methacrylate.

6. (Currently Amended) Compositions for preservative treatment of animal rawhides as specified in claim 1, wherein the superabsorbent polymers are

selected from members of the group consisting of: crosslinked polyacrylamides; crosslinked polyacrylates; crosslinked acrylamide/acrylate copolymers; sulfomethylated or chloromethylated acrylamide/dimethyl-aminoethylacrylate (ADAME) copolymers; sulfomethylated or chloromethylated acrylamide/dimethyl-aminoethylmethacrylate (MADAME) copolymers; crosslinked polymers of acrylic acid or methacrylic acid, inoculated and crosslinked copolymers of the polysaccharide/acrylic or methacrylic acid type acids, ternary crosslinked acrylic or methacrylic acid/sulfonated acrylamide copolymers and their alkaline metal or alkaline earth salts; hydrolyzates of crosslinked inoculated polysaccharide/acrylate or alkyl methacrylate copolymers, hydrolyzates of reticulated inoculated polysaccharide/acrylonitrile copolymers, hydrolyzates of crosslinked polysaccharide/acrylamide copolymers; hydrolyzates of crosslinked alkyl/vinyl acetate acrylate or methacrylate copolymers; hydrolyzates of crosslinked inoculated starch/acrylonitrile/acrylamide/2-methylpropane sulfonic acid copolymers; hydrolyzates of crosslinked inoculated starch/acrylonitrile/vinylsulfonic acid copolymers; hydrolyzates of reticulated sodium carboxy-methylcellulose and analogous products and mixtures of such products; crosslinked polymers of acrylic or methacrylic acid; crosslinked inoculated polysaccharide/acrylic or methacrylic acid copolymers, and ternary crosslinked acrylic or methacrylic acid/acrylamide/sulfonated acrylamide copolymers.

7. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions comprise mixtures of superabsorbents.

8. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions comprise mixtures of superabsorbents, of different grain sizes adapted to obtain optimal coverage of the surface of the hide.

9. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions comprise mixtures of superabsorbents, of different chemical composition.

10. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions comprise mixtures of superabsorbents, of different grain size and chemical composition.

11. (Currently Amended) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions comprise mixtures of superabsorbents and at least one hydrophilic or and at least one hygroscopic agent.

12. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions include the salt NaCl as the at least one other hygroscopic agent.

13. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions include CaCl₂, MgCl₂, KCl as the at least one other hygroscopic agent.

14. (Currently Amended) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein the ratios of the superabsorbent polymer and other hygroscopic agent or agents range from 80 to 20% by weight.

15. (Currently Amended) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein the ratios of the superabsorbent polymer to the other hygroscopic agent or agents range from 65 to 35% by weight.

16. (Currently Amended) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein the ratios of the superabsorbent polymer to the other hygroscopic agent or agents range around 50/50% by weight.

17. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein the superabsorbent polymers have a grain size smaller than approximately 6 mm.

18. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein the superabsorbent polymers have a particle size ranging from 0.5 to 3 mm.

19. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein the superabsorbent polymers have a grain size around 0.3 to 1 mm.

20. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein a portion of grains of the superabsorbent polymers have a fine grain size and another portion have a coarser grain size.

21. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions contain additives.

22. (Previously Presented) Compositions for preservative treatment of raw animal hides as specified in any of claims 1 to 21, wherein such compositions contain at least one bactericide.

Claim 23 (Canceled)

24. (Currently Amended) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions contain the following superabsorbents ~~and hygroscopic agent~~:

NaCl + superabsorbent 1 (reticulated polyacrylate; grain size 0.5-3 mm) or
superabsorbent 2

(Reticulated polyacrylate; grain size 100-800 microns) or

superabsorbent 1 + superabsorbent [[2]] 2'

(Reticulated polyacrylate + reticulate acrylamide/acrylate copolymer, grain size

0.1 to 3 mm) or

superabsorbent 3

(Chloroethylated, reticulated (2-(dimethyl-amino ethyl)) (2-(idern)-methacrylate))

acrylamide copolymer, grain size 0.5-3 mm) or

superabsorbent 4

(Chloromethylated, reticulated ((2-dimethyl-amino ethyl) acrylate) acrylamide copolymer, grain size 0.5-3 mm).

25. (Currently Amended) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions contain the following agents: reticulated acrylamide/acrylate

200 g/kg hide of superabsorbent, referring to the amount of reticulated acrylamide/acrylate.

200 g/kg hide of NaCl.

26. (Previously Presented) A process for preservative treatment of raw animal hides, comprising contacting a hide with a preservative composition as specified in claim 1.

27. (Previously Presented) A process for preservative treatment of raw animal hides, wherein such process comprises at least one stage of contact of a hide, on the surface opposite the hair, with a preservative composition as specified in claim 1.

28. (Previously Presented) A process for preservative treatment of raw animal hides as specified in claim 26, wherein such contact is continued for a period of around 24 h.

29. (Previously Presented) Animal hides, characterized in that such hides have been treated for preservation with a composition as specified in claim 1.

30. (Previously Presented) Animal hides, characterized in that such hides have been treated for preservation by a process as specified in claim 26.

31. (Previously Presented) A method for preserving an animal hide comprising applying an effective amount of the composition of claim 1 to the animal hide.

32. (Previously Presented) A method for preserving an animal hide comprising applying an effective amount of the composition of claim 1 and one or more hygroscopic agent(s) to the animal hide.

33. (Original) The composition of claim 1 wherein said bactericides and preservative agents are contained in the composition.

34. (Currently Amended) The composition of claim 1 wherein said super absorbent polymers are (meth)acrylic acid, acrylic acid, ~~methacrylic acid~~, maleic acid, or fumaric acid.

35. (Previously Presented) The composition of claim 1 wherein said super absorbent polymers are maleic anhydride.

36. (Previously Presented) The composition of claim 1 wherein said super absorbent polymers are sodium (meth)acrylate, trimethylamine (meth)acrylate, triethanolamine (meth)acrylate, sodium maleate or methylamine maleate.

37. (Previously Presented) The composition of claim 1 wherein said super absorbent polymers are vinylsulfonic acid, allylsulfonic acid, vinyltoluenesulfonic acid or styrene sulfonic acid.

38. (Currently Amended) The composition of claim 1 wherein said super absorbent polymers are (meth)acrylic sulfonic acids, (sulfopropyl (meth)acrylate, propyl 2-hydroxy-3-(meth)acryloxide sulfonic acid.

39. (Currently Amended) The composition of claim 1 wherein said super absorbent polymers are formed from (meth)allyl alcohol, ethers or esters of polyols with monoethylene unsaturation, alkylene glycols, glycerol, polyoxyalkylene polyols, hydroxyethyl (meth)acrylate, hydroxypropyl (meth)acrylate, triethylene glycol (meth)acrylate or mono (meth)allyl ether of poly(oxyethylene) oxypropylene (in which the hydroxyl groups may be etherified or esterified).

40. (Previously Presented) The composition of claim 1 wherein said super absorbent polymers are N-methylacrylamide, N-hexylacrylamide, N,N-dimethylacrylamide, N,N-di-n-propylacrylamide, N-methyl (meth)acrylamide, N-hydroxyethyl (meth)acrylamide, N,N-dihydroxyalkyl (meth)acrylamides, N,N-dihydroxyethyl (meth)acrylamide, vinyl lactames or N-vinylpyrrolidone.

41. (Currently Amended) The composition of claim 1 wherein said super absorbent polymers are esters of morpholinoalkyl morpho-linealkyl, dimethylaminoethyl (meth)acrylate, diethylaminoethyl (meth)acrylate, mopholinoethyl (meth)acrylate, dimethylaminoethyl fumarate, vinyl pyridines, 2-vinyl pyridine, 4-vinyl pyridine, N-vinyl pyridine or N-vinyl imidazole.

42. (Currently Amended) The composition of claim 1 wherein said super absorbent polymers are N,N,N-trimethyl-N-(meth)acryloyloxyethylammonium chloride, triethyl-N-(meth)acryloyloxyethylammonium chloride or trimethyl ammonium 2-hydroxy-3-(meth)acryloyl-oxypropyl) 3-(meth)-acryloyl-oxypropyl.

43. (Previously Presented) The composition of claim 1 wherein said super absorbent polymers are reticulation products of an acrylic acid homopolymer or of a salt of this acid, acrylic acid (or acrylic acid salt)/methacrylic acid (or methacrylic acid salt), or inoculated starch/acrylic acid (or acrylic acid salt) copolymers.

44. (Previously Presented) The composition of claim 1 wherein said super absorbent polymers are products of reticulation of inoculated hydrolyzed starch/ethyl acrylate copolymers, hydrolyzed inoculated starch/methyl methacrylate copolymers, hydrolyzed inoculated starch/acrylonitrile copolymers, or hydrolyzed inoculated starch/acrylamide copolymers.

45. (Previously Presented) The composition of claim 1 wherein said super absorbent polymers are products of reticulation of hydrolyzed ethyl methacrylate/vinyl acetate copolymers or of hydrolyzed methyl acrylate/vinyl acetate copolymers.

46. (Original) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein the superabsorbent polymers have a grain size ranging from 0.3 to 4 mm.